AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

Claims 1-4 (canceled).

5. (currently amended): An optical material cured by exposing an active energy beam-curable composition for optical material to an active energy beam, the composition ~~comprising~~ consisting of unsaturated group-containing monomers and optionally one or more components selected from the group consisting of a photoinitiator, pigment, dye, an antifoaming agent, a leveling agent, an inorganic filler, an organic filler, a light stabilizer, an oxidation inhibitor, an ultraviolet absorbing agent, a polymerization inhibitor, and a thermal polymerization initiator,

the unsaturated group-containing monomers consisting of

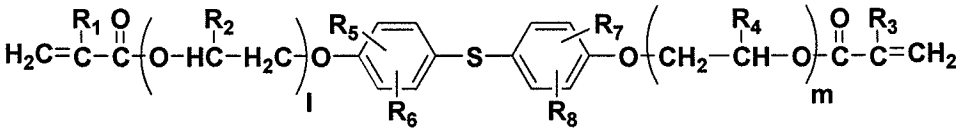
(a) (A) a di(meth)acrylate represented by the following formula (1) (component (A)) and (B) a mono(meth)acrylate represented by the following formula (2) (component (B)); or

(b) the component of (A), the component (B), and (D) an unsaturated group-containing monomer other than the components (A) and (B),

wherein (D) the unsaturated group-containing monomer other than the components (A) and (B) is a compound selected from the group consisting of phenoxyethyl (meth)acrylate, carbitol (meth)acrylate, N-vinyl caprolacton, acryloyl morpholine, glycidyl (meth)acrylate, 2-hydroxyethyl (meth)acrylate, 2-hydroxypropyl (meth)acrylate, 1,4-butanediol

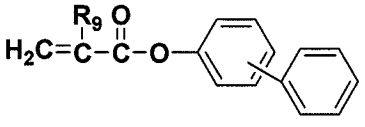
mono(meth)acrylate, 1,6-hexanediol di(meth)acrylate, nonanediol diacrylate, polyethylene glycol di(meth)acrylate, 2-hydroxy-3-phenyloxypropyl (meth)acrylate, tribromophenyl (meth)acrylate, 2,2-bis(4-(meth)acryloyloxyethoxyphenyl-propane, 2,2-bis(4-(meth)acryloyloxydiethoxyphenyl)-propane, 2,2-bis(4-(meth)acryloyloxytriethoxyphenyl)-propane, ethylene glycol di(meth)acrylate, tribromophenyloxyethyl (meth)acrylate, trimethylolpropane tri(meth)acrylate, pentaerythritol tetra(meth)acrylate, bisphenol A epoxy resin di(meth)acrylate, polyurethane poly(meth)acrylate and polyester poly(meth)acrylate; ~~and/or a mono(meth)acrylate represented by the following formula (3),~~

wherein the composition contains 10 to 90 wt % of the component (A) and 90 to 10 wt % the component (B) on the basis of the total weight of the components (A) and (B):



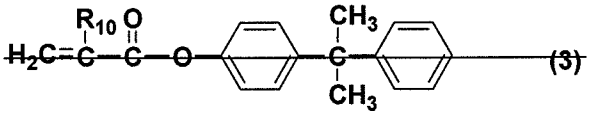
(1)

wherein R_1 and R_3 independently represents a hydrogen atom or a methyl group, R_2 and R_4 independently represents a hydrogen atom, a methyl group or an ethyl group, R_5 to R_8 independently represents a hydrogen atom, a methyl group or a bromine atom, and l and m independently represents an integer of 1 to 6; and



(2)

wherein R_9 represents a hydrogen atom or a methyl group~~; and~~



~~wherein R_{10} represents a hydrogen atom or a methyl group~~.

6. (previously presented): The optical material according to Claim 5, wherein each of R_1 and R_3 is a hydrogen atom in the formula (1).

7. (previously presented): The optical material according to Claim 5, wherein each of R_2 and R_4 is a hydrogen atom in the formula (1).

8. (previously presented): The optical material according to Claim 5, wherein all of R_5 to R_8 are hydrogen atoms; R_5 is a hydrogen atom and R_6 is a methyl group, and R_7 is a hydrogen atom and R_8 is a methyl group; or R_5 is a hydrogen atom and R_6 is a bromine atom, and R_7 is a hydrogen atom and R_8 is a bromine atom.

9. (previously presented): The optical material according to Claim 5, wherein each of l and m is an integer of 1 to 3.

10. (previously presented): The optical material according to Claim 5, wherein the component (A) is bis(4-acryloxyethoxyphenyl) sulfide, bis(4-acryloxydiethoxyphenyl) sulfide, bis(4-acryloxyethoxy-3-methylphenyl) sulfide or bis(4-acryloxydiethoxy-3-methylphenyl) sulfide.

11. (previously presented): The optical material according to Claim 5, wherein the mono(meth)acrylate represented by the formula (2) is o-phenylphenyl (meth)acrylate.

12. (currently amended): The optical material according to Claim 5, wherein ~~the composition further comprises~~ (C) a photoinitiator is present in the composition.

13. (previously presented): The optical material according to Claim 5, wherein the composition contains 30 to 90 wt % of the component (A) and 70 to 10 wt % of the component (B).

14. (previously presented): The optical material according to Claim 5 having a refractive index (25°C) of 1.59 or more.

15. (previously presented): The optical material according to Claim 5, wherein the optical material is a lens sheet or a plastic lens.

16. (currently amended): A method for producing an optical material comprising:

a step of applying or pouring an active energy beam-curable composition for optical material to a casting mold having a predetermined shape, wherein the composition ~~comprises~~ consists of unsaturated group-containing monomers and optionally one or more components selected from the group consisting of a photoinitiator, pigment, dye, an antifoaming agent, a leveling agent, an inorganic filler, an organic filler, a light stabilizer, an oxidation inhibitor, an ultraviolet absorbing agent, a polymerization inhibitor, and a thermal polymerization initiator,

the unsaturated group-containing monomers consisting of

(a) (A) a di(meth)acrylate represented by the following formula (1) (component (A)) and (B) a mono(meth)acrylate represented by the following formula (2) (component (B)); or

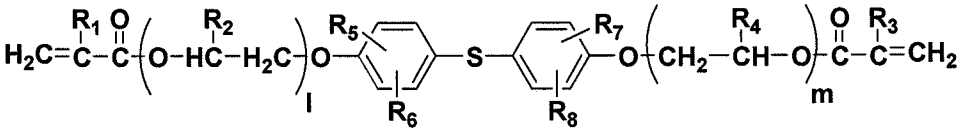
(b) the component of (A), the component (B), and (D) an unsaturated group-containing monomer other than the components (A) and (B),

wherein (D) the unsaturated group-containing monomer other than the components (A) and (B) is a compound selected from the group consisting of phenoxyethyl (meth)acrylate,

carbitol (meth)acrylate, N-vinyl caprolacton, acryloyl morpholine, glycidyl (meth)acrylate, 2-hydroxyethyl (meth)acrylate, 2-hydroxypropyl (meth)acrylate, 1,4-butanediol mono(meth)acrylate, 1,6-hexanediol di(meth)acrylate, nonanediol diacrylate, polyethylene glycol di(meth)acrylate, 2-hydroxy-3-phenyloxypropyl (meth)acrylate, tribromophenyl (meth)acrylate, 2,2-bis(4-(meth)acryloyloxyethoxyphenyl-propane, 2,2-bis(4-(meth)acryloyloxydiethoxyphenyl)-propane, 2,2-bis(4-(meth)acryloyloxytriethoxyphenyl)-propane, ethylene glycol di(meth)acrylate, tribromophenyloxyethyl (meth)acrylate, trimethylolpropane tri(meth)acrylate, pentaerythritol tetra(meth)acrylate, bisphenol A epoxy resin di(meth)acrylate, polyurethane poly(meth)acrylate and polyester poly(meth)acrylate; ~~and/or a mono(meth)acrylate represented by the following formula (3) in~~

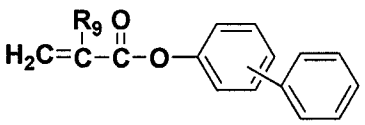
wherein the composition contains 10 to 90 wt % of the component (A) and 90 to 10 wt % of the component (B) on the basis of the total weight of the components (A) and (B), and

a step of irradiating an active energy beam after the applying or pouring;



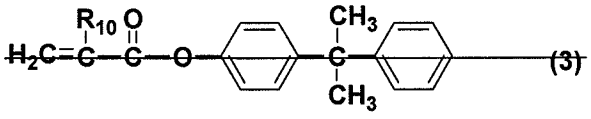
(1)

wherein R_1 and R_3 independently represents a hydrogen atom or a methyl group, R_2 and R_4 independently represents a hydrogen atom, a methyl group or an ethyl group, R_5 to R_8 independently represents a hydrogen atom, a methyl group or a bromine atom, and l and m independently represents an integer of 1 to 6; and



(2)

wherein R_9 represents a hydrogen atom or a methyl group~~; and~~



(3)

~~wherein R_{10} represents a hydrogen atom or a methyl group~~.

17. (previously presented): The method for producing an optical material according to Claim 16, wherein each of R_1 and R_3 is a hydrogen atom in the formula (1).

18. (previously presented): The method for producing an optical material according to Claim 16, wherein each of R_2 and R_4 is a hydrogen atom in the formula (1).

19. (previously presented): The method for producing an optical material according to Claim 16, wherein all of R_5 to R_8 are hydrogen atoms; R_5 is a hydrogen atom and R_6 is a methyl group, and R_7 is a hydrogen atom and R_8 is a methyl group; or R_5 is a hydrogen atom and R_6 is a bromine atom, and R_7 is a hydrogen atom and R_8 is a bromine atom, in the formula (1).

20. (previously presented): The method for producing an optical material according to Claim 16, wherein each of l and m is an integer of 1 to 3 in the formula (1).

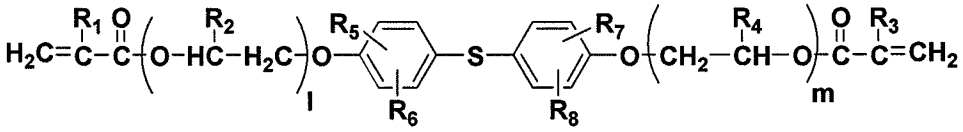
21. (previously presented): The method for producing an optical material according to Claim 16, wherein the component (A) is bis(4-acryloxyethoxyphenyl) sulfide, bis(4-acryloxydiethoxyphenyl) sulfide, bis(4-acryloxyethoxy-3-methylphenyl) sulfide or bis(4-acryloxydiethoxy-3-methylphenyl) sulfide.

22. (previously presented): The method for producing an optical material according to Claim 16, wherein the mono(meth)acrylate represented by the formula (2) is o-phenylphenyl (meth)acrylate.

23. (currently amended): The method for producing an optical material according to Claim 16, wherein ~~the composition further comprises~~ (C) a photoinitiator is present in the composition.

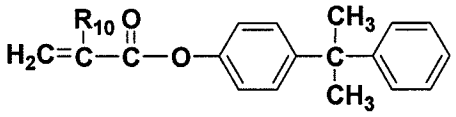
24. (currently amended): The method for producing an optical material according to Claim 16, wherein the active energy beam-curable composition ~~comprises~~ contains 30 to 90 wt % of the component (A) and 70 to 10 wt % of the component (B).

25. (currently amended): ~~The~~ An optical material ~~according to Claim 5, wherein the composition comprises a di(meth)acrylate represented by formula (1) and a mono(meth)acrylate represented by formula (3)~~ cured by exposing an active energy beam-curable composition for optical material to an active energy beam, the composition comprising (A) a di(meth)acrylate represented by the following formula (1) (component (A)) and (B) a mono(meth)acrylate represented by the following formula (3) (component (B)), wherein the composition contains 10 to 90 wt % of the component (A) and 90 to 10 wt % the component (B) on the basis of the total weight of the components (A) and (B):



(1)

wherein R_1 and R_3 independently represents a hydrogen atom or a methyl group, R_2 and R_4 independently represents a hydrogen atom, a methyl group or an ethyl group, R_5 to R_8 independently represents a hydrogen atom, a methyl group or a bromine atom, and l and m independently represents an integer of 1 to 6; and



(3)

wherein R_{10} represents a hydrogen atom or a methyl group.

26. (previously presented): The optical material according to Claim 25, wherein the mono(meth)acrylate represented by formula (3) is p-cumylphenol (meth)acrylate.

27. (currently amended): The optical material according to Claim 5, ~~wherein the composition comprises a di(meth)acrylate represented by formula (1) and a mono(meth)acrylate represented by formula (2),~~ wherein the di(meth)acrylate represented by formula (1) is bis(4-acryloxyethoxyphenyl) sulfide and the mono(meth)acrylate represented by formula (2) is o-phenylphenyl (meth)acrylate.

28. (currently amended): The optical material according to Claim ~~5, wherein the composition comprises a di(meth)acrylate represented by formula (1) and a mono(meth)acrylate represented by formula (3)~~ 25, wherein the di(meth)acrylate represented by formula (1) is bis(4-acryloxyethoxyphenyl) sulfide and the mono(meth)acrylate represented by formula (3) is p-cumylphenol (meth)acrylate.

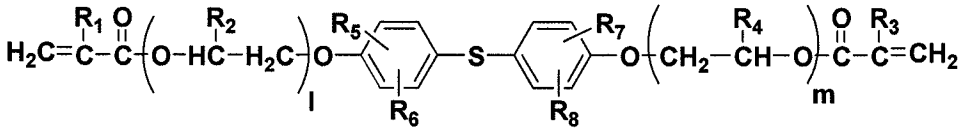
29. (new): The optical material according to Claim 5, wherein the composition contains 0 to 50% of the component (D).

30. (new): A method for producing an optical material comprising:

a step of applying or pouring an active energy beam-curable composition for optical material to a casting mold having a predetermined shape, wherein the composition comprises (A) a di(meth)acrylate represented by the following formula (1) (component (A)) and (B) a

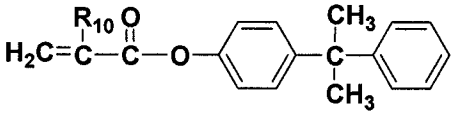
mono(meth)acrylate represented by the following formula (3) (component (B)), wherein the composition contains 10 to 90 wt % of the component (A) and 90 to 10 wt % of the component (B) on the basis of the total weight of the components (A) and (B), and

a step of irradiating an active energy beam after the applying or pouring;



(1)

wherein R_1 and R_3 independently represents a hydrogen atom or a methyl group, R_2 and R_4 independently represents a hydrogen atom, a methyl group or an ethyl group, R_5 to R_8 independently represents a hydrogen atom, a methyl group or a bromine atom, and l and m independently represents an integer of 1 to 6; and



(3)

wherein R_{10} represents a hydrogen atom or a methyl group.

31. (new): The method for producing an optical material according to Claim 30, wherein the mono(meth)acrylate represented by formula (3) is p-cumylphenol (meth)acrylate.

32. (new): The method for producing an optical material according to Claim 16, wherein the di(meth)acrylate represented by formula (1) is bis(4-acryloxyethoxyphenyl) sulfide and the mono(meth)acrylate represented by formula (2) is o-phenylphenyl (meth)acrylate.

33. (new): The method for producing an optical material according to Claim 30, wherein the di(meth)acrylate represented by formula (1) is bis(4-acryloxyethoxyphenyl) sulfide and the mono(meth)acrylate represented by formula (3) is p-cumylphenol (meth)acrylate.

34. (new): The method for producing an optical material according to Claim 16, wherein the composition contains 0 to 50% of the component (D).